Claims

1. A method, including steps of

determining first values for a plurality of first parameters and at least one second parameter for a communication link, said first parameters being associated with a first layer of an OSI model communication system and said second parameter being associated with a second layer of an OSI model communication system;

sending first information using said first values;

obtaining second information regarding characteristics of said communication link in response to a result of said steps of sending; and

adjusting a plurality of said first values in conjunction in response to said second information, whereby further use of said communication link is responsive to said steps of adjusting.

2. A method as in claim 1, wherein said first layer and said second layer are selected from the group: a physical layer, a media access layer, a network layer, a transport layer, an application layer.

3. A method as in claim 1, wherein said first parameters include at least two of: an antenna selection value, a power level value, a channel selection value, a modulation type value, a symbol rate value, an error code type value, a set of equalization values.

4. A method as in claim 1, wherein said second parameters include at least one of: a payload element size, a message size value, a set of acknowledgment and retransmission values, a TDD duty cycle value.

5. A method as in claim 1, wherein said steps of adjusting include steps of dynamically selecting a set of altered first values in response to said second information, said set of altered first values including at least two changes to said first parameters and said second parameters, said set of altered first values having been determined to be superior to altered first values having only one change to said first parameters and said second parameters.

6. A method as in claim 1, wherein said communication link is subject to at least one of: interference effects, multipath effects, both interference effects and multipath effects.

7. A method as in claim 1, wherein said communication link includes a wireless communication link.

8. A method as in claim 1, wherein said communication link includes a plurality of distinguishable channels, said channels being distinguished using a plurality of: frequency division, time division, space division, spread spectrum code division.

9. A method as in claim 1, wherein said communication link includes a plurality of distinguishable channels, said channels being distinguished using at least one of: frequency division, time division, space division, spread spectrum code division.

10. A method as in claim 1, including steps of

recording an old set of said first values for said communication link;

and wherein said steps of adjusting include

calculating a new set of said first values for said communication link in response to a result of said steps of obtaining second information;

combining an adjusted set of said first values adaptively in response to said old set of said first values and said new set of said first values.

11. A method is in claim 10, wherein said steps of combining include determining said adjusted set using at least one hysteresis parameter.

12. A method as in claim 1, wherein said steps of adjusting are responsive to a type of protocol being used by at least one of the group: a physical layer, a media access layer, a network layer, a transport layer, an application layer.

13. A method as in claim 12, wherein said steps of adjusting are responsive to whether an application layer protocol is for asymmetric transfer of information.

14. A method as in claim 12, wherein said steps of adjusting are responsive to whether an application layer protocol is for sending voice or video information.